ABSTRACT

A rapid access valve for a pneumatic tire on a rim comprises a tubular stem and a flexible base made of a rubber-like material. The bushing is bonded to the outer surface of the stem by an over-molding procedure. The stem has a flanged end with two cylindrical elements adjacent to it forwardly and rearwardly.

The flanged stem and the connector are configured in respect to each other in such a manner so as to provide a releasable conduit through which a pressurized media can be delivered into a pneumatic tire or withdrawn from it.

The connector assembly is equipped with a centrally located core depressor for engaging with a stop valve pin and for depressing it into the open position when the connector is attached onto the valve.

The connector has a plurality of bearings, serving as detaining elements, for fast and reliable lockage of the connector onto the valve. The flanged end of the stem is configured to accept the displaceable bearings and to allow the bearings to fall behind the flange, formed on the outer periphery of the stems forward end, thus being locked between the outer surface of the stem and inner surface of the coaxially movable collar of the connector.

Pulling the connector's collar coaxially and away from the valve releases the bearings from their locked deployment and allows the pressure blocking member of the stop-valve to return to its normally closed position.